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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/699,553	10/31/2000	Hiroki Tanaka	Q61563	7370
7590	07/14/2004		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3202			FAN, CHIEH M	
			ART UNIT	PAPER NUMBER
			2634	
			DATE MAILED: 07/14/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/699,553	TANAKA, HIROKI	
	Examiner	Art Unit	
	Chieh M Fan	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 May 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 14 is/are allowed.
 6) Claim(s) 3-12 is/are rejected.
 7) Claim(s) 1,2,13 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 October 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because "input data" in Fig 8a and Fig. 8b should be changed to --- input data ---. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The applicant elected not to change "correlator #0" in line 9 of page 27 to "correlator #1" in the reply. The applicant is then invited to check whether the mathematical expression " $C_K S_0 + C_{2K} S_K + \dots + C_{MK} S_{(M-1)K}$ " in lines 10-11 should be changed to --- $C_0 S_0 + C_K S_K + \dots + C_{(M-1)K} S_{(M-1)K}$ ---.

Further, the disclosure is objected to because of the following informalities: "th 0th chip" in line 12 of page 27 should be changed to --- the 0th chip ---.

Appropriate correction is required.

Claim Objections

3. Claims 1-13 are objected to because of the following informalities:

Regarding claim 1,

"there-arrayed" in line 5 should be changed to --- the re-arrayed ---;

"said received signal" in line 7 should be changed to --- said received signal ---.

Regarding claim 3,

"said (R+1) correlators" in line 10 apparently should be --- said first correlator --- (see page 14, lines 6-8 of the specification);

"said (R+1)st correlator" in line 14 apparently should be --- the Rth correlator ---.

Regarding claim 4,

"device" in line 1 should be changed to --- The device ---.

Regarding claim 6,

“a plurality of or K symbols” in line 3 should be changed to --- a plurality of K symbols ---;

“each said symbols” in line 4 should be changed to --- each of said symbols ---;
“said spread code shift register” in line 2 of step (g) should be changed to --- the spread code shift register ---.

Regarding claim 7,

“said fixed pattern detection device” in line 4 should be changed to --- the fixed pattern device ---;

“said second correlator” in line 12 apparently should be changed to --- said first correlator --- (see page 14, lines 6-8 of the specification);

“which is said spread code” in line 13 should be changed to --- which is said spread code ---.

Regarding claim 8,

“said second correlator” in line 10 apparently should be changed to --- said first correlator --- (see page 14, lines 6-8 of the specification).

Regarding claim 10, the limitation “dividing said L into plural portions” in lines 5-6 is not understood. It is not clear how to divide an integer L into plural portions

Regarding claim 12,

“said plural spread code shift registers” in line 6 should be changed to --- said K spread code shift registers ---.

Regarding claim 13, it is suggested changing "the fixed pattern detection device" in lines 1-2 to --- the device for detecting the fixed pattern --- for the reason of consistency.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 6-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification never teaches that the correlation value storage memory controller controls reading-out of the correlation value from said received signal storage memory as recited in step (i) of claim 6. Further, the specification never teaches second-stage correlators calculates correlation values between the correlation values read out from said correlation value storage memory controller and said signature pattern stored in said signature pattern storage unit as recited in step (k) of claim 6.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 3, the limitation "K correlator blocks" recited in line 5 has no connection with the parent claims (claims 1 and 2), which renders the claim indefinite.

Regarding claim 4, the limitation "K correlator blocks" recited in line 6 has no connection with the parent claims (claims 1 and 2), which renders the claim indefinite.

Regarding claim 5, the limitation "K correlator blocks" recited in line 6 has no connection with the parent claims (claims 1 and 2), which renders the claim indefinite.

Response to Arguments

8. Applicant's arguments filed 5/3/04 have been fully considered but they are not persuasive.

Regarding the rejections of claims 6-12 under 35 USC 112, first paragraph, the applicant argues that the specification teaches the limitation "reading out the correlation value from said received signal storage memory" in page 28 lines 16-18.

Examiner's response --- The portion referred by the applicant only teaches reading out the received signal from the received signal storage memory. However, such teaching is not the claimed limitation. As shown in Fig. 1 of the present

application, the correlation value storage memory controller 110 never controls reading-out of the correlation value from the received signal storage memory 104.

Allowable Subject Matter

9. Claims 1, 2 and 13 would be allowable if rewritten to overcome the claim objections above. Claim 14 is allowed.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M Fan whose telephone number is (703) 305-0198. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.

Chieh M Fan
Chieh M Fan
Primary Examiner
Art Unit 2634

cmf
July 7, 2004